

DRILL HOLES

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BORDER REV. DATE: JUNE 1, 2004

PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of an existing Traffic Control Signal with interconnect at the intersection of MD 187 (Old Georgetown Road) and Executive Blvd in Montgomery County. At Executive Blvd, the existing Traffic Signal heads shall be replaced with LED modules. APS pushbuttons shall be installed for all directions. MD 187 (Old Georgetown Road) is assumed to run a north-south direction.

II. INTERSECTION OPERATION

MD 187 (Old Georgetown Road)/Executive Blvd

- The intersection is to operate in a NEMA six-phase, semi-actuated mode, with the MD 187 (Old Georgetown Road) approaches running concurrently. The Exclusive/Permissive left turn phase for the northbound approach and an Exclusive phase for southbound approach of MD 187 (Old Georgetown Road) shall remain in operation. APS pushbuttons shall be provided for all legs of this intersection. The pedestrian phases across Executive Blvd shall be on recall with countdown peds. The Exclusive/Permissive left turn phase shall continue to operate as normal for the eastbound approach of Executive Blvd. The Executive Blvd approaches shall continue to operate concurrently.

- The existing fully-actuated, eight-phase controller shall be used to house the APS equipment.

III. SPECIAL NOTES

- The Contractor shall be responsible for terminating all signal cables, excluding interconnect, to the appropriate terminals and shall properly label each cable.
- All controller cabinet wiring will be performed by Montgomery County Forces. Signal Shop. Contact Kamal Hamud at (240) 777-8761 seventy-two hours in advance of intended work.
- All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.

4. APS will function as follows:

FOR MD 187 (OLD GEORGETOWN ROAD)

- When pedestrian locates and presses pushbutton for an extended time, the pushbutton unit will announce "Wait to cross Old Georgetown at Executive"
- When WALK phase begins, the message will be a rapid tick which will last for the duration of the WALK phase.

FOR Executive Boulevard

- When pedestrian locates and presses pushbutton for an extended time, the pushbutton unit will announce "Wait to cross Executive at Old Georgetown"
- When WALK phase begins, the message will be a rapid tick which will last for the duration of the WALK phase.

The contacts for Montgomery County are as follows:

Mr. Jeff Wentz
Assistant District Engineer - Traffic
Phone: (301) 513-7318

Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
Phone: (410) 787-7630

Mr. Mike Kinney
Mont. County Traffic
240-777-8760

Mr. Wayne Mowdy
Assistant District Engineer - Maintenance
Phone: (301) 513-7304

Mr. Keith Lord
Signal Shop (Mont Co.)
301-674-8965

Mr. Kamal Hamud
Mont. County TMC Center
240-777-8761

Mr. Augie Rebish
District Engineer - Utility
Phone: (301) 513-7350

Mr. Sonny Bailey
Sign Shop
410-787-7670

EQUIPMENT LIST (CONT. FOR ADA. XX6355176)

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR

CAT. CODE NO.	DESCRIPTION	QUANTITY
634300	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH	150 L.F.
655105	5 INCH CONCRETE SIDEWALK	625 S.F.
655120	DETECTABLE WARNING SURFACE FOR CURB RAMPS	120 S.F.

EQUIPMENT LIST (CONT.)

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR

ITEM NO.	DESCRIPTION	QUANTITY
1001	Maintenance of traffic per assignment.	1 EA
2002	Test Pit Excavation	7 C.Y.
5001	Removal of existing permanent pavement line markings any width	405 L.F.
8001	12" LED signal head section.	6 EA
8002	2 wire Central Control unit	1 EA
8007	Audible/tactile pedestrian pushbutton station & signs.	8 EA
8008	Breakaway pedestal pole (5' & 10')	7 EA
8011	LED signal head modules (any size).	37 EA
8013	Remove and dispose of equipment (per assignment)	1 EA
8018	Schedule 80 rigid PVC conduit up to 4" - trenched.	100 L.F.
8023	Electrical cable - 2 conductor (No. 14 AWG).	1500 L.F.
8025	Electrical cable - 5 conductor (No. 14 AWG).	160 L.F.
8033	No. 6 AWG stranded bare copper ground wire.	150 L.F.
8034	Install overhead or ground mounted sign.	41 S.F.

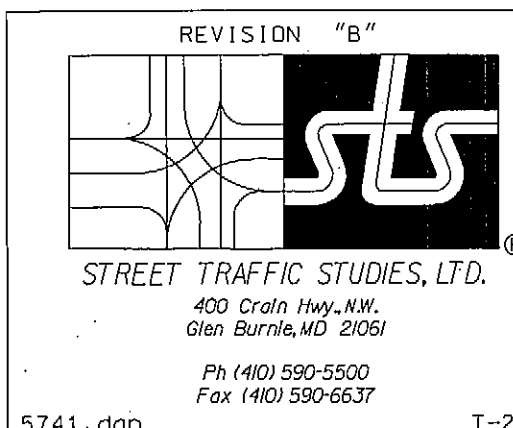
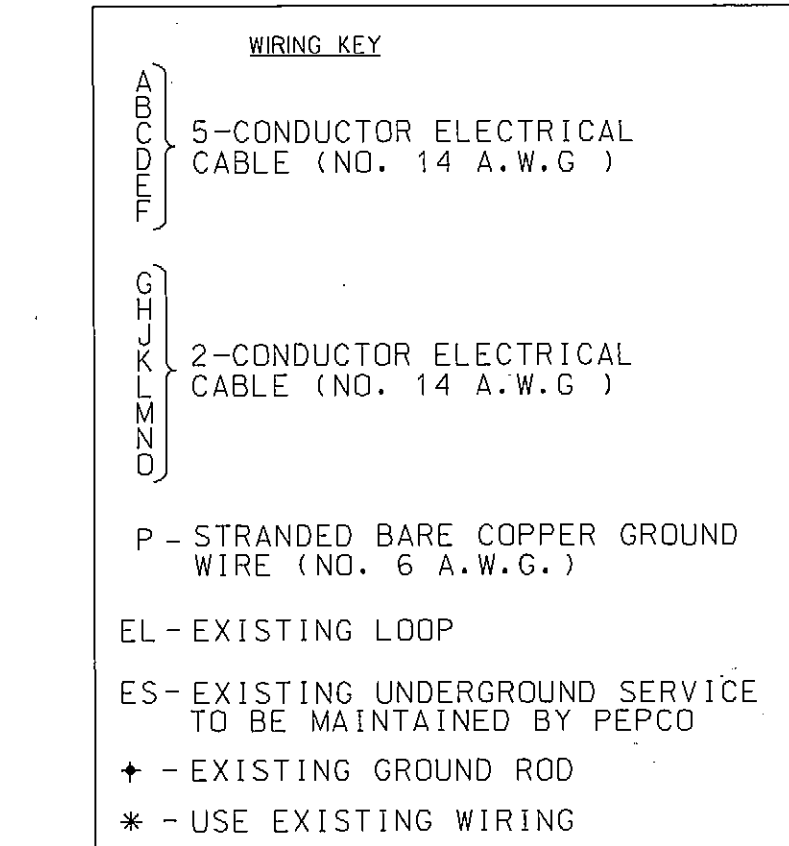
C. EQUIPMENT TO BE REMOVED

All removed signal materials are to become property of the contractor.

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY S.H.A.

ITEM NO.	DESCRIPTION	QUANTITY
9570	Sheet aluminum signs to consist of: (ground mount).	33 SF
	W11-2 "PEDESTRIAN CROSSING (SYMBOLIC)" sign. (30" x 30")	4 EA
	W16-7P(L) "arrow (symbolic)" diagonal sign. (12" x 24")	2 EA
	W16-7P(L) "arrow (symbolic)" diagonal sign. (12" x 24")	2 EA
9571	Sheet aluminum signs to consist of: (pole mount)	8 SF
	Pedestrian education R10-3(1) (Note: Sign to read "PUSHBUTTON TO CROSS OLD GEORGETOWN ROAD")	4 EA
	Pedestrian education R10-3(1) (Note: Sign to read "PUSHBUTTON TO CROSS EXECUTIVE BOULEVARD.")	4 EA



5741.dgn

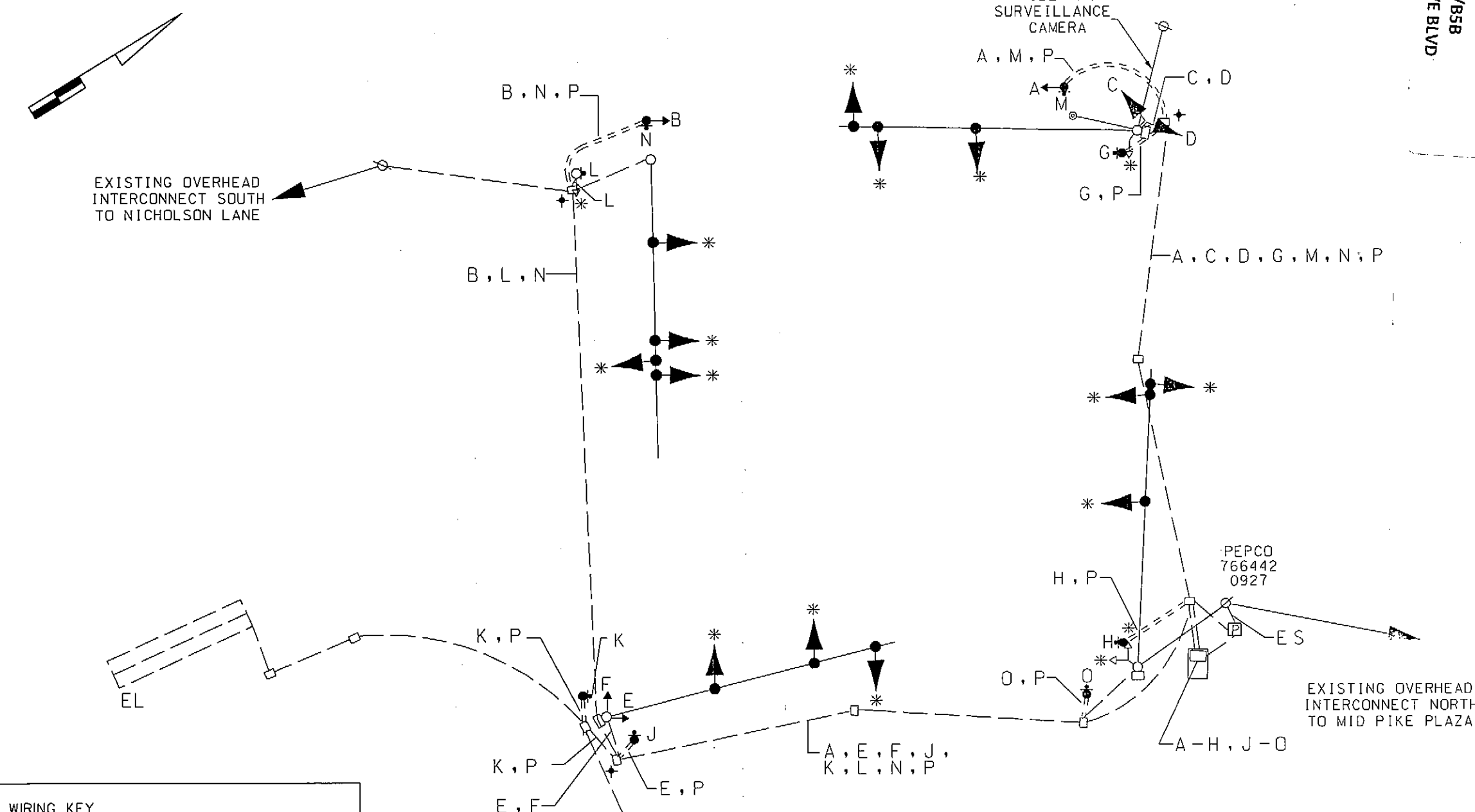
T-244

PLOTTED: TUESDAY, OCTOBER 27, 2009 AT 2:22:27 PM
FILE: 57416.DGN

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
PHASE 1 & 5	←G-R	←G-R	R	←G-	R	←G-	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
CHANGES TO PHASES 1 & 6, 2 & 5 OR 2 & 6																							
PHASE 1 & 6	←G-R	←G-R	G	←R-	R	←R-	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
1 & 6 CHANGE	←Y-G	←Y-G	G	←R-	R	←R-	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 & 5	R	R	R	←G-	G	←G-	G	G	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
2 & 5 CHANGE	R	R	R	←Y-	G	←Y-	G	G	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 & 6	G	G	G	←R-	G	←R-	G	G	R	R	R	R	R	R	R	WK	WK	WK	WK	DW	DW	DW	DW
PED CLEAR / COUNTDOWN	G	G	G	←R-	G	←R-	G	G	R	R	R	R	R	R	R	FL/DW	FL/DW	FL/DW	FL/DW	DW	DW	DW	DW
2 & 6 CHANGE	Y	Y	Y	←R-	Y	←R-	Y	Y	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 & 7	R	R	R	←R-	R	←R-	R	R	R	R	R	R	G	←G-G	←G-G	G	DW	DW	DW	DW	DW	DW	DW
4 & 7 CHANGE	R	R	R	←R-	R	←R-	R	R	R	R	R	R	G	←Y-G	←Y-G	G	DW	DW	DW	DW	DW	DW	DW
PHASE 4 & 8	R	R	R	←R-	R	←R-	R	R	G	G	G	G	G	G	G	G	DW	DW	DW	DW	DW	DW	DW
4 & 8 CHANGE	R	R	R	←R-	R	←R-	R	R	R	R	R	R	G	←G-G	←G-G	G	DW	DW	DW	DW	DW	DW	DW
PHASE 4 & 7 ALT	R	R	R	←R-	R	←R-	R	R	R	R	R	R	G	←Y-G	←Y-G	G	DW	DW	DW	DW	DW	DW	DW
4 & 7 ALT CHANGE	R	R	R	←R-	R	←R-	R	R	R	R	R	R	G	←Y-G	←Y-G	G	DW	DW	DW	DW	DW	DW	DW
PHASE 4 & 8 ALT	R	R	R	←R-	R	←R-	R	R	G	G	G	G	G	G	G	G	DW	DW	DW	DW	WK	WK	WK
PED CLEAR / COUNTDOWN	R	R	R	←R-	R	←R-	R	R	G	G	G	G	G	G	G	G	DW	DW	DW	DW	FL/DW	FL/DW	FL/DW
4 & 8 ALT CHANGE	R	R	R	←R-	R	←R-	R	R	Y	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/←R	FL/Y	FL/←R	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	DARK	DARK

WIRING DIAGRAM



STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

MD 187 (OLD GEORGETOWN RD)
AND EXECUTIVE BLVD.

ROCKVILLE, MARYLAND

GENERAL INFORMATION SHEET

SCALE: NONE DATE: 8-26-09 CONTRACT NO.: XX4275185
SHA No.: XX6355176

DESIGNED BY: JAMES ALLEN JR. COUNTY: MONTGOMERY
DRAWN BY: JAMES ALLEN JR. LOGMILE: 15018705.04
CHECKED BY: TMS NO. J103
F.A.P. NO. TOD NO.

TS NO. 4382B DRAWING NO. 2 OF 2 SHEET NO. OF